

IN THE CLAIMS

1. (Amended) A method of data transmission on demand to a plurality of clients without acknowledgment, the method comprising:

dividing information content stored on a server into information data units,
each of said information data units comprising a rectangular matrix of lines and
columns;

assigning numbers to said lines and columns;

reorganizing said information data units by collecting lines to which the same
numbers are assigned into reorganized data units;

forming a plurality of data portions from the reorganized data units and control
data units having check information for corresponding information data units;

constantly transmitting the plurality of data portions to at least one router on a
server side for constant availability of the information content to the plurality of
clients;

upon receiving a content request at one of a plurality of channels at the at least
one router from one of the plurality of clients, sending a random ~~portion from one~~
of the plurality of data portions to the one of the plurality of clients, the random
portion comprising data indicating whether the random portion is part of the
requested content; and

if the random portion is part of the requested content, sending the rest of the
requested content to the one of the plurality of clients via the one of the plurality
of channels.

2. (Previously Presented) The method of Claim 1, wherein the plurality of data portions are transmitted simultaneously via parallel channels.
3. (Original) The method of Claim 2, wherein said parallel channels are combined into groups of channels having the same data transmission speed in each group.
4. (Previously Presented) The method of Claim 3, wherein the plurality of data portions is transmitted simultaneously via all said groups.
5. (Amended) The method of Claim 1, wherein ~~dividing the information content~~ forming the plurality of data portions comprises:
 - ~~dividing the information content into data segments;~~
 - ~~dividing each one of said data segments into information data units, each of said information data units comprising a rectangular matrix of lines and columns;~~
 - ~~assigning numbers to said lines and columns;~~
 - determining check information for each one of said information data units using parity check data in corresponding lines and columns;
 - collecting said check information from all said information data units to form control data units;
 - ~~reorganizing said information data units by collecting lines to which the same numbers are assigned into reorganized data units;~~
 - assigning identification information to each of said reorganized data units and said control data units; and
 - forming information protocol data units and control protocol data units by combining said identification information with respective reorganized data units and said control data units.
6. Canceled.
7. Canceled.
8. Canceled.

9. Canceled.
10. (Previously Presented) The method of Claim 5, wherein the rest of the requested content is transmitted to the one of the plurality of clients via one channel having the speed of transmission corresponding to that at the one of the plurality of clients.
11. (Previously Presented) The method of Claim 10, further comprising the one of the plurality of clients checking completeness of the transmitted content by:
 - collecting said information protocol data units and said control protocol data units relating to said portion of said requested content selected by the one of the plurality of clients;
 - extracting said reorganized information data units from said information protocol data units;
 - extracting said control data units from said control protocol data units;
 - checking completeness of said information data units relating to each said data segment in said portion of said requested content selected by the one of the plurality of clients; and
 - converting said reorganized data units to the form preceding ~~said step of the reorganizing.~~
12. (Previously Presented) The method of Claim 11, further comprising:
 - assembling each of said data segments contained in said portion of said requested content selected by the one of the plurality of clients from said information data units related to said data segments, if said information data units are present; and
 - assembling each of said data segments contained in said portion of said requested content selected by the one of the plurality of clients from said information data units related to said data segments.
13. (Previously Presented) The method of Claim 12, further comprising of:

interrupting the receiving, if all portions of the requested content are received.

14. Canceled.

15. (Previously Presented) The method of Claim 11, further comprising:

restoring said data lost during the receiving by means of said control data unit
and those of said information data units which have been received by the one of the
plurality of clients and relates to the same data segment.

16. Canceled.

17. Canceled.

18. Canceled.

19. Canceled.

20. Canceled.

21. Canceled.

22. Canceled.

23. Canceled.

24. Canceled.

25. Canceled.

26. Canceled.

27. Canceled.

28. (Amended) A system for data transmission on demand to a plurality of clients without acknowledgment, the system comprising:

a data storage device to store information content in a plurality of files;

at least one server to divide the information content into information data units, each of said information data units comprising a rectangular matrix of lines and columns, to assign numbers to said lines and columns, to reorganize said information data units by collecting lines to which the same numbers are assigned into reorganized data units, to form a plurality of data portions from the reorganized data units and control data units having check information for corresponding information data units, and to distribute the plurality of data portions to at least one data transmission unit;

a plurality of send boxes in the at least one data transmission unit to constantly transmit the plurality of data portions to at least one router; and

the at least one router to cause the information content to be constantly available to the plurality of clients at a plurality of channels, to receive a content request at one of the plurality of channels, to send a random one of portion from the plurality of data portions to the one of the plurality of clients, the random portion comprising data indicating whether the random portion is part of the requested content, and to send the rest of the requested content to the one of the plurality of clients via the one of the plurality of channels if the random portion is part of the requested content.

29. (Amended) A machine readable medium having stored thereon executable code which causes a machine to perform a method of data transmission on demand to a plurality of clients without acknowledgment, the method comprising:

dividing information content stored on a server into information data units, each of said information data units comprising a rectangular matrix of lines and columns;

assigning numbers to said lines and columns;

reorganizing said information data units by collecting lines to which the same numbers are assigned into reorganized data units;

forming a plurality of data portions from the reorganized data units and control data units having check information for corresponding information data units;

constantly transmitting the plurality of data portions to at least one router on a server side for constant availability of the information content to the plurality of clients;

upon receiving a content request at one of a plurality of channels at the at least one router from one of the plurality of clients, sending a random one of portion from the plurality of data portions to the one of the plurality of clients, the random portion comprising data indicating whether the random portion is part of the requested content; and

if the random portion is part of the requested content, sending the rest of the requested content to the one of the plurality of clients via the one of the plurality of channels.